

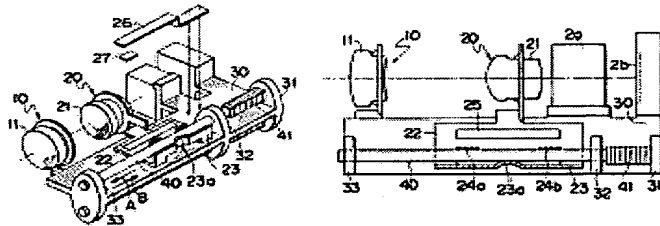
## Drive and guide mechanism and apparatus using the mechanism

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### Abstract of US6134057

A lens driving device which does not make larger an apparatus in which the device is installed, which ensures a longer span for preventing a tilt of a lens therein, and which allows an easy access to the lens after assemblage is disclosed. The lens driving device includes a stationary board; a lens frame holding a lens group; a moving body like a flat plate one end of which is fixed to the lens frame in which the moving body is slid over the stationary board; and a rod, extending in an optical direction of the lens, which guides the moving body in the optical direction and is driven by a piezoelectric element. In the arrangement, the other end of the flat plate is frictionally held by the rod over a predetermined distance in the optical direction. When the piezoelectric element is supplied with a voltage with a predetermined waveform, the lens frame is driven in the direction of the optical axis by the moving body frictionally engaging the rod.



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